



1: Identification

Wear self-contained respirator.

## Product identifier Product name: Manganese(II) carbonate

Stock number: 14344 CAS Number: 598-62-9 EC number: 209-942-9 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789. 2: Hazard(s) identification Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 The substance is not classified as hazardous to health or the environment according to the CLP regulation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable Information concerning particular hazards for human and environment: No information known. Hazards not otherwise classified No information known. Label elements Labelling according to Regulation (EC) No 1272/2008 Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) EALTH I Health (acute effects) = 1 RE 0 Flammability = 0 EACTIVITY 1 Physical Hazard = 1 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. 3: Composition/information on ingredients Chemical characterization: Substances CAS# Description: 598-62-9 Manganese(II) carbonate EC number: 209-942-9 4: First-aid measures Description of first aid measures After inhalation Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Drink lots of water. Induce vomiting if patient is conscious. Call a doctor immediately. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available. 5: Fire-fighting measures Extinguishing media Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dióxide Metal oxide fume Advice for firefighters Protective equipment:

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Wear fully protective impervious suit.		(Contd. of page 1)		
6: Accidental release measures Personal precautions, protective equipment and emergency procedures Avoid formation of dust. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow to enter sewers/ surface or ground water. Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil. Methods and material for containment and cleaning up: Prevent formation of dust. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 13 for disposal information.				
7: Handling and storage				
Handling Precautions for safe handling Thoroughly remove all dust particles. Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Information about protection against explosions and fires: The product is not flammable Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Do not store together with acids. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available.				
8: Exposure controls/personal protection Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters				
Components with limit values that re				
598-62-9 Manganese(II) carbonate (10 PEL (USA) Ceiling limit value: 5 mg/r				
PEL (USA)       Ceiling inflit value: 5 mg/m³ as Mn         REL (USA)       Short-term value: 3 mg/m³ box as Mn         TLV (USA)       Long-term value: 0.02* 0.1* mg/m³ as Mn         TLV (USA)       Long-term value: 0.02* 0.1* mg/m³ as Mn         EL (Canada)       Long-term value: 0.2 mg/m³ as Mn;				
Additional information: No data				
Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of gloves Eye protection: Safety glasses Body protection: Protective work clothing.				
9: Physical and chemical proper	rties			
Information on basic physical and ch	nemical properties			
General Information Appearance: Form: Color: Odor:	Powder Light brown to violet Odorless			
Odor threshold:	Not determined.			
pH-value:	Not applicable.			
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	350 °C (662 °F) (dec) Not determined Not determined			
Flash point: Flammability (solid, gaseous) Ignition temperature:	Not applicable Product is not flammable. Not determined			
Ignition temperature:	Not determined	(Contd. on page 3)		
		00.1		

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Decomposition temperature: Auto igniting:	Not determined Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower: Upper:	Not determined Not determined
/apor pressure:	Not applicable.
Density at 20 °C (68 °F): Relative density	3.125 g/cm³ (26.078 lbs/gal) Not determined.
/apor density Evaporation rate	Not applicable. Not applicable.
Solubility in / Miscibility with	Not applicable.
Water at 20 °C (68 °F): Partition coefficient (n-octanol/wat	0.065 g/l ter): Not determined
Viscosity:	
dynamic: kinematic:	Not applicable. Not applicable.
Other information	No further relevant information available.
10: Stability and reactivity	
Reactivity No information known.	
Chemical stability Stable under reco	ommended storage conditions.
Thermal decomposition / condition To avoid thermal decomposition do n	is to be avoided: lot overheat.
Decomposes before melting.	
Possibility of hazardous reactions Conditions to avoid No further relev	reacts with actus /ant information available.
Incompatible materials:	
Acids Oxidizing agents	
Hazardŏuš decomposition product Metal oxide fume	ts:
Carbon monoxide and carbon dioxide	Э
11: Toxicological information	
Information on toxicological effect	'S
Acute toxicity: No effects known.	
LD/LC50 valúes that are relevant fo Skin irritation or corrosion: May ca	
Eye irritation or corrosion: May cau	use irritation
Sensitization: No sensitizing effects Germ cell mutagenicity: No effects	known.
Carcinogenicity: EPA-D: Not classifi	fiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available.
Reproductive toxicity: No effects kr	nown. <b>ity - repeated exposure:</b> No effects known.
Specific target organ system toxic	ity - single exposure: No effects known.
Aspiration hazard: No effects known Subacute to chronic toxicity: No ef	n. Ifects known
Additional toxicological informatio	n:
To the best of our knowledge the acu The substance is not subject to class	ite and chronic toxicity of this substance is not fully known. ification.
12: Ecological information	
Toxicity	
Aquatic toxicity: No further relevant	information available.
Persistence and degradability No for Bioaccumulative potential No furthe	further relevant information available.
<b>Mobility in soil</b> No further relevant in	nformation available.
Additional ecological information: General notes:	
Do not allow material to be released t	to the environment without proper governmental permits.
Do not allow undiluted product or larg Avoid transfer into the environment.	ge quantities to reach ground water, water course or sewage system.
Results of PBT and vPvB assessm	ient de la constant d
PBT: Not applicable. vPvB: Not applicable.	
Other adverse effects No further rel	levant information available.
13: Disposal considerations	
Waste treatment methods	
Recommendation Consult state, loca	al or national regulations to ensure proper disposal.
Uncleaned packagings: Recommendation: Disposal must be	e made according to official regulations.
14: Transport information	
UN-Number	
DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
	Not applicable
Class	Not applicable
	Not applicable Not applicable (Contd. on page

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Environmental hazards:	Not applicable.		
Special precautions for user	Not applicable.		
Transport in bulk according to Annex II of MARPOL	73/78 and the IBC Code Not applicable.		
Transport/Additional information:			
DOT			
Marine Pollutant (DOT):	No		
UN "Model Regulation":	-		
15: Regulatory information			
Safety, health and environmental regulations/legisla	ation specific for the substance or mixture		
National regulations	vironmental Protection Agency Toxic Substances Control Act Chemical substance Inventory		
All components of this product are listed in the Canadia	vironmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. an Domestic Substances List (DSL).		
SARA Section 313 (specific toxic chemical listings)			
598-62-9 Manganese(II) carbonate California Proposition 65			
Prop 65 - Chemicals known to cause cancer Substar Prop 65 - Developmental toxicity Substance is not liss Prop 65 - Developmental toxicity, female Substance Prop 65 - Developmental toxicity, male Substance is Information about limitation of use: For use only by t Other regulations, limitations and prohibitive regula Substance of Very High Concern (SVHC) according The conditions of restrictions according to Article 6 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Au REACH - Pre-registered substances Substance is list Chemical safety assessment: A Chemical Safety Asse	ted. is not listed. not listed. technically qualified individuals. ations to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. 57 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the thorisation for use) Substance is not listed. ted.		
valid contractual relationship.	owever, this shall not constitute a guarantee for any specific product features and shall not establish a legally ement to other information gathered by them, and should make independent judgement of suitability of this and safety of employees. This information is furnished without warranty, and any use of the product not in a combination with any other product or process, is the responsibility of the user.		
Department issuing SDS: Global Marketing Departme Abbreviations and acronyms:	ent Jangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) Deuts (Charges a Agree and Regulations the laterning in el Carriero de Deutsport Coangerous Goods by Rail)		

LDSD: Letrial uses, 30 period in VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)